



Joint Capabilities Integration and Development System (JCIDS) Changes

Sources:

CJCSI 3170.01I, 23 Jan 2015

CJCSI 5123.01G, 15 Feb 2015

JCIDS Manual, 12 Feb 2015 with errata, 23 Feb 2015

Joint Staff, J-8

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- Review of 2012 Changes
- 2015 Changes
- Requirements Acquisition Interface
- Refined Capabilities-Based Assessment (CBA) Guidance
- Portfolio Management
- Document Content Changes
- Changes to Mandatory KPPs
- Intelligence Supportability
- IT Box Changes – Addition of the IS-CDD
- Staffing and Validation Changes
- DODAF Architecture Views
- Managing an Information System (IS) Requirement

What did we change in Jan 2012?



2012 Changes (part 1 of 2)

- Consolidated Guidance: CJCSI 5123.01 (JROC Charter), CJCSI 3170.01 (JCIDS), and the JCIDS Manual are the core products
 - CJCSI 3137.01 (FCBs) and CJCSI 3470.01 (JUONs) cancelled, with content absorbed into the three core documents.
- Requirements Training:
 - Mandated Requirements Management Certification Training (RMCT)
- Implemented Study Notification/Repository:
 - Centralized repository for CBAs and other studies/analyses supporting JCIDS documents to facilitate visibility, collaboration, and re-use
- Documents:
 - Page limits: ICD (10), DCR (30), CDD (45), CPD (40)
 - Implemented "IT Box" construct - IS ICD.
 - Institutionalized JUONs and JEONs for urgent/emergent needs.
 - Clarified joint visibility requirements for all documents
 - Clarified submission of higher classification documents/issues
 - (June 2012) Introduced alternate/streamlined document formats

- Organizations:

- Added CCMDs as full members of JROC
- Disestablished the Building Partnerships FCB
- Established SAP Integration Group
- Established Joint Requirements Assessment Division (JRAD)
- Clarified Joint Staff J-7 Role and DOTmLPF-P Endorsement

- Staffing:

- Streamlined staffing: Deliberate: 83 days. Urgent/Emergent : 15-31 days
- Placed focus on finding “knee in the curve” tradeoffs
- Post-AoA review of results/recommendations and draft KPP review

- Post-Validation:

- More robust Tripwire Process – for cost, schedule, quantity changes.
- Institutionalized Capability Gap Assessment (CGA) Process
- Introduced a post-fielding assessment for JUONs/JEONs

2015: The Evolution Continues...



2015 Changes (part 1 of 2)

- Consolidated Guidance: CJCSI 5123.01 (JROC Charter), CJCSI 3170.01 (JCIDS), and the JCIDS Manual are still the core products
 - CJCSI 3312.01 (Intelligence Certification), CJCSI 6212.01 (Net-Ready KPP), and JWSTAP Charter (Weapon Safety Endorsement) cancelled, with content absorbed into the three core documents
 - Significant revision of Intelligence Certification content
- Roles/Responsibilities:
 - Expanded guidance for stakeholder roles/responsibilities in CJCSI 5123
- Developing Requirements:
 - Refined CBA guidance
 - Focus on leveraging DODAF to streamline development activities
 - ICD Attributes: "Initial Objective Values" vice "Minimum Values"
 - Enable more robust leverage of S&T efforts to satisfy requirements
 - Introduces the Capability-Mission Lattice as a framework for traceability to operational missions
 - Increased focus on ensuring attributes are measurable and testable

- Documents:

- Streamlines document formats (starts with June 2012 alternate formats)
- Adds Net-Ready KPP to IS-ICD; Extends “IT Box” construct to IS CDD
- Aligns affordability sections of CDDs/CPDs with new DODI 5000.02
- Content/Endorsement guides for Mandatory KPPs, Weapon Safety endorsement, DOTmLPF-P endorsement, and Intelligence Certification
- Requires “validation page” to be combined with JCIDS documents

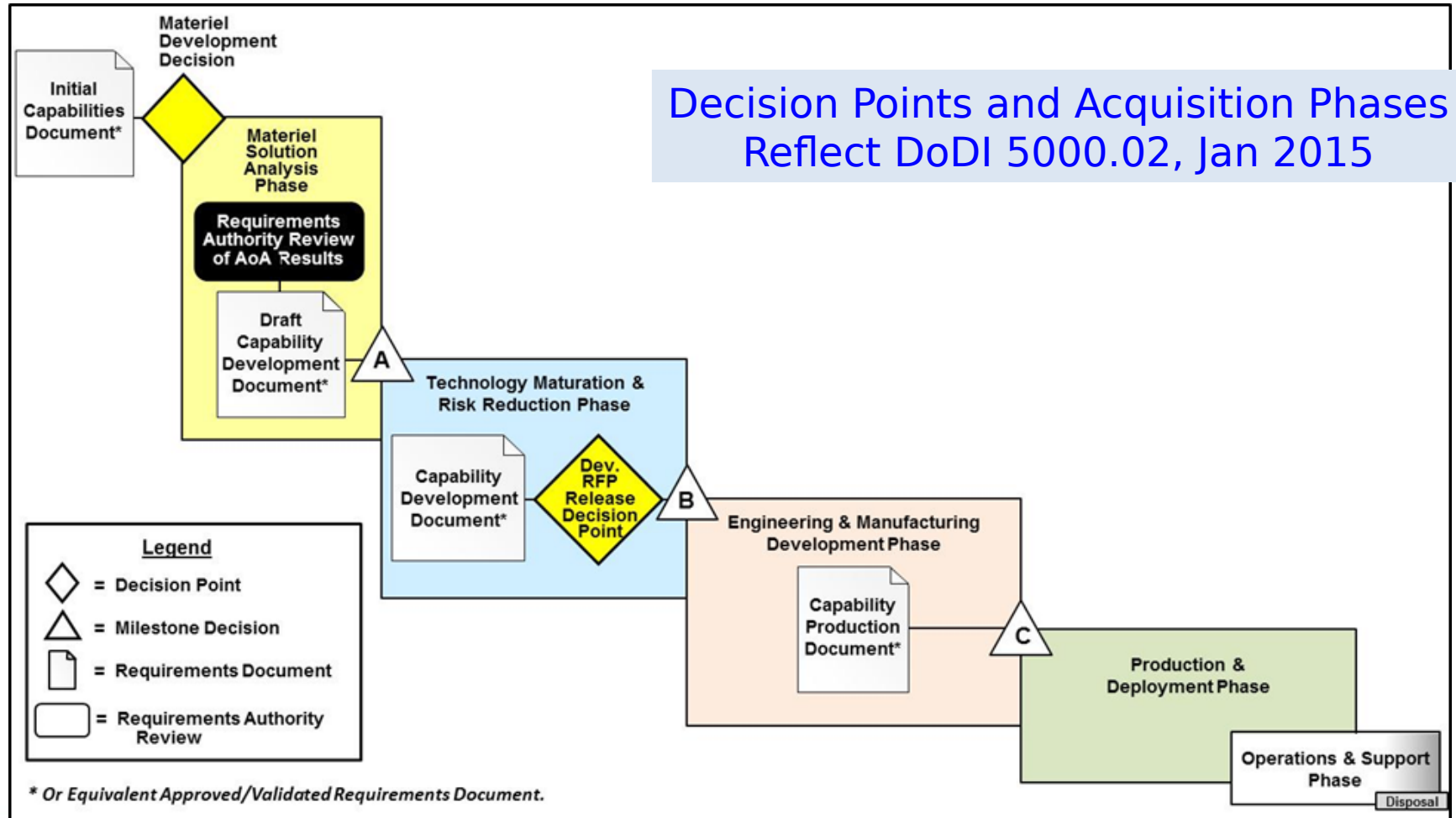
- Staffing:

- Merges JSDs of Joint Information and Independent
- Integrates Common gatekeeping with DCMO for Defense Business Systems
- Enhances guidance for submission and review of higher classification documents/issues, including SAP/SAR and ACCM

- Portfolio Management:

- Consolidates “post validation processes” and “prioritization” guidance into the “portfolio management” guidance.

Requirements – Acquisition Interaction





Refined CBA Guidance

2012 - CBA Steps



2015 - CBA Steps

1. Identify Mission or Military Problem to be Assessed: Use OPLANS, CONPLANS, Integrated Security Constructs, results of the Chairman's Risk Assessment (CRA); Assess Threats and Timeframe
2. Identify and Build Upon Previous CBAs and Other Studies
3. Determine Level of Analytical Rigor
4. Perform Operational Assessment of Current and Programmed Force to Determine Capability Requirements and Gaps
5. Determine if Non-Materiel Approach appropriate
6. If Risks Remain, Assess General Approaches for Materiel Solutions
7. Offer Recommendations
8. Provide Results to KM/DS Studies

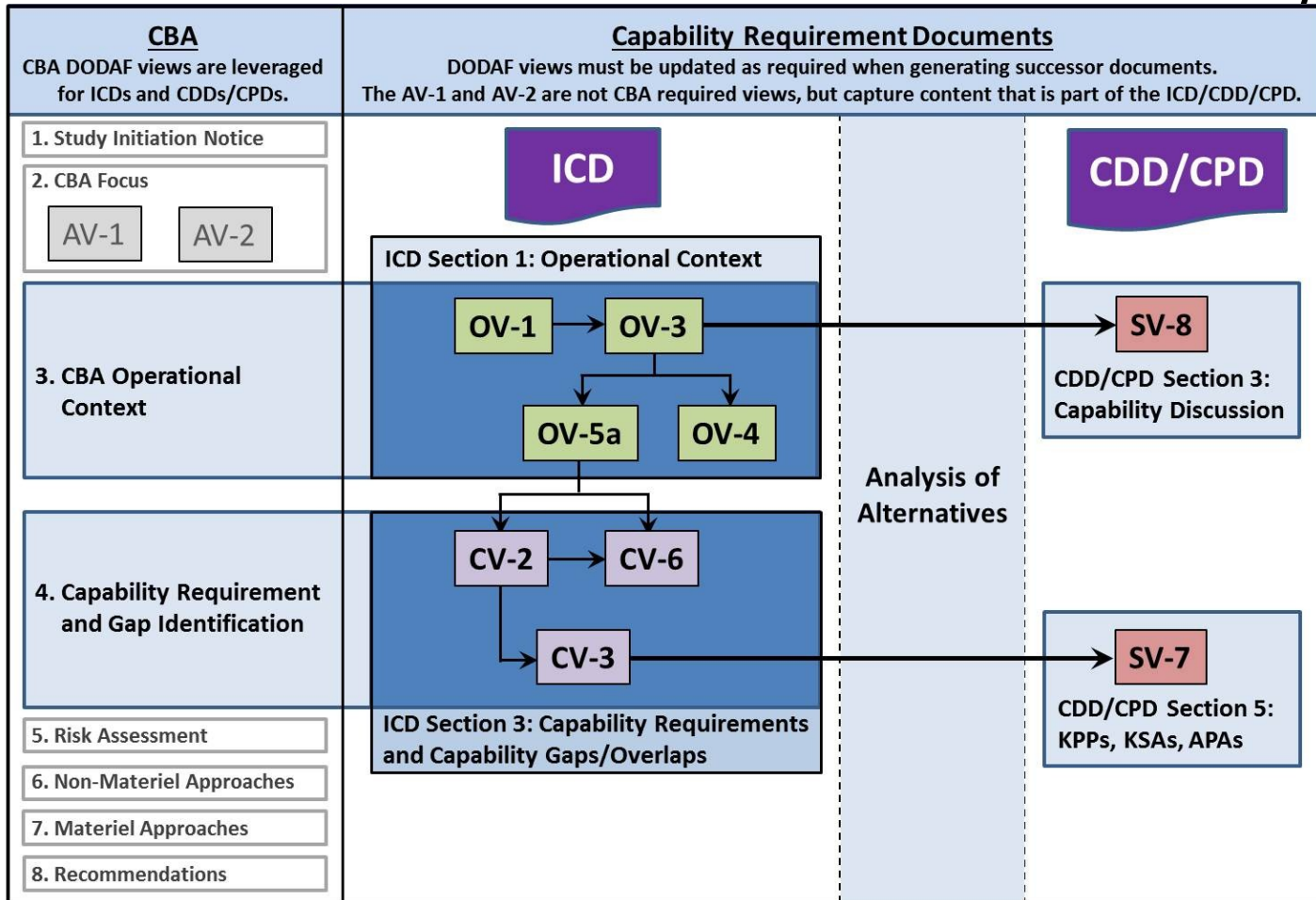
1. Submit Study Initiation Notice into Joint Staff Gatekeeper. Determine and Build Upon Previous Studies
2. Determine CBA Focus: Strategic Context, Missions and Scenarios, Joint Lessons Learned, Use of DODAF Views
3. Determine Operational Context: Timeframe, threats, Concepts and CONOPS
4. Identify Operational Tasks: Use Applicable OPLANS, CONPLANS, Concepts, CONOPS and Variations; DODAF OV-5a - Operational Activity Decomposition Tree
5. Identify Capability Requirements and Gaps: Use of DODAV OV-3, CV-2, CV-3, CV-6 and OV-5a; use of Support to Strategic Analysis (SSA) Products.
6. Conduct Assessment of Risks and Consequences
7. Determine Non-Materiel Approaches
8. If Risks Remain, Assess General Approaches for

Repository

Materiel Solutions



DODAF Architecture Data Flow from CBA to CDD/CPD

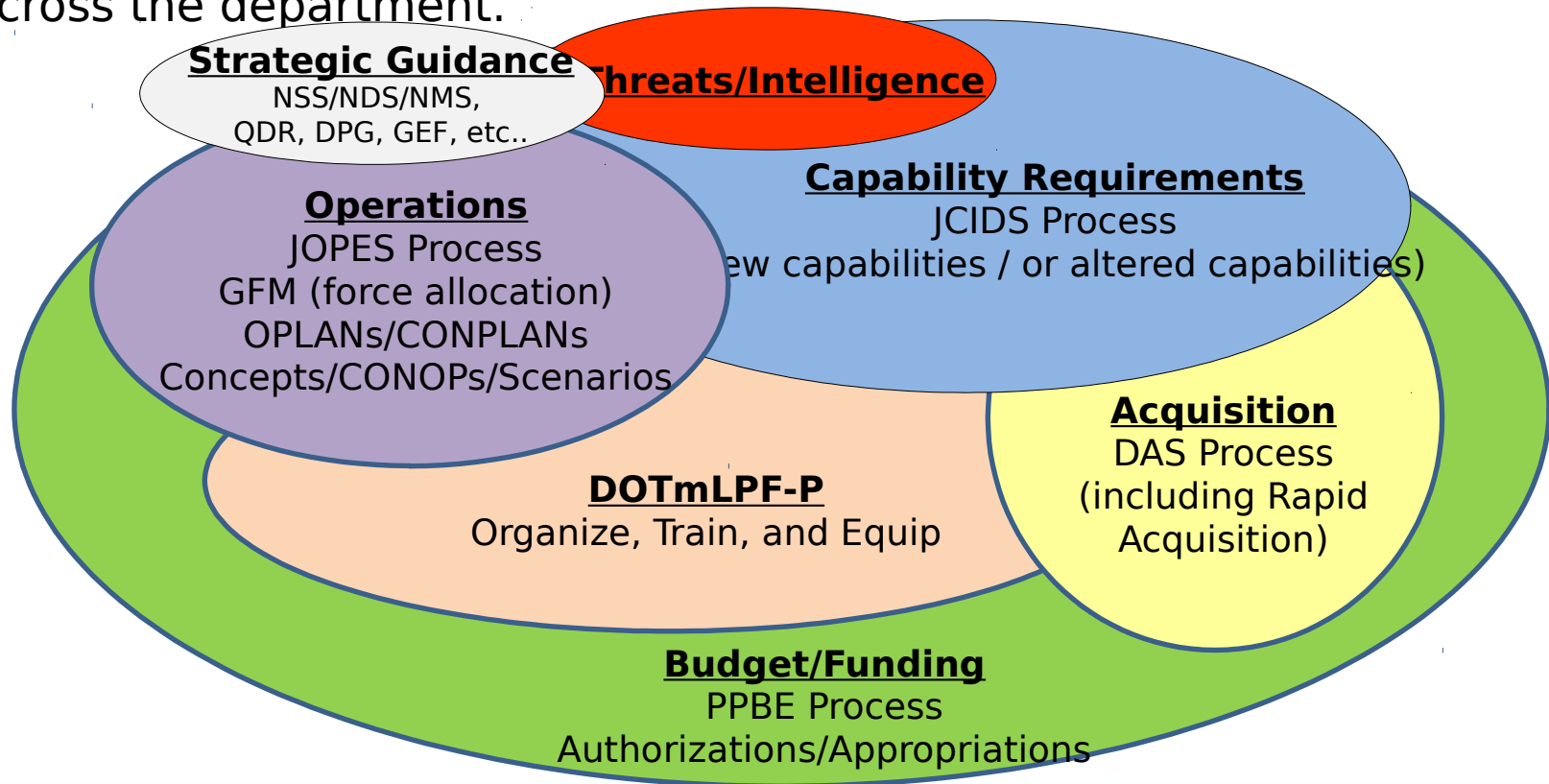


Capability Requirement Portfolio Management

The Key to Robust Integration in an Uncertain Future

Consolidates “post validation processes” and “prioritization” guidance into the “portfolio management” guidance.

The capability requirement portfolios managed under the JCIDS process inform and are informed by other processes and activities across the department.

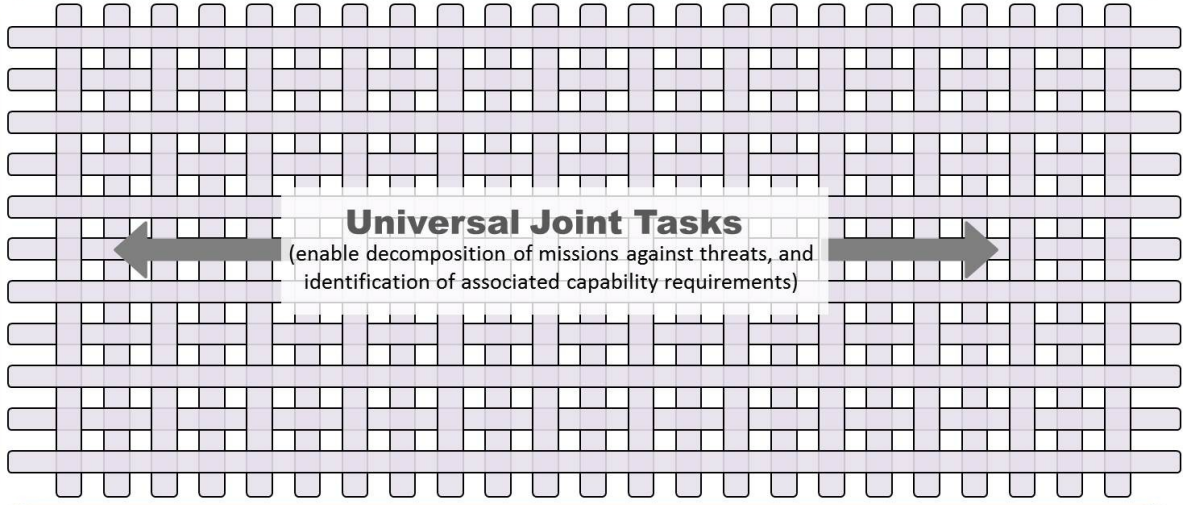
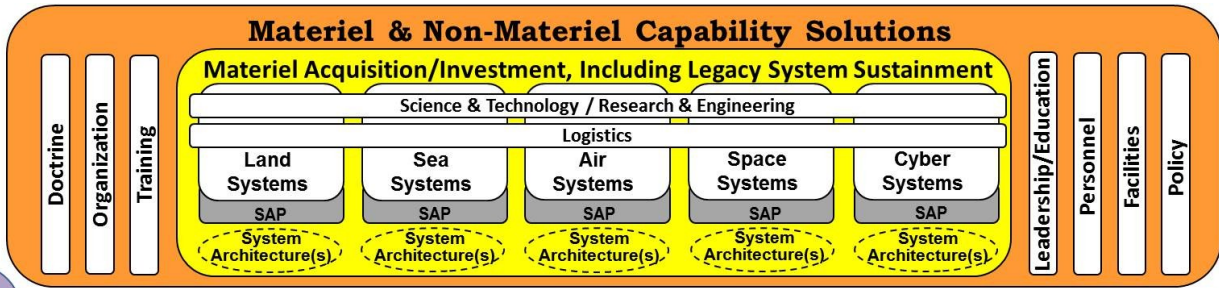


- Stakeholders must understand capability dependencies, relationship to the Universal Joint Tasks (UJT) they enable, and the missions they support.
- The Capability Mission Lattice (CML) (next slide) provides a logical construct for dependencies and traceability of capability requirements.
- Knowledge of historical decisions and rationale, including past cycles of Capability Gap Assessment (CGA) and Program Budget Review (PBR), is also critical to make informed assessments and decisions.

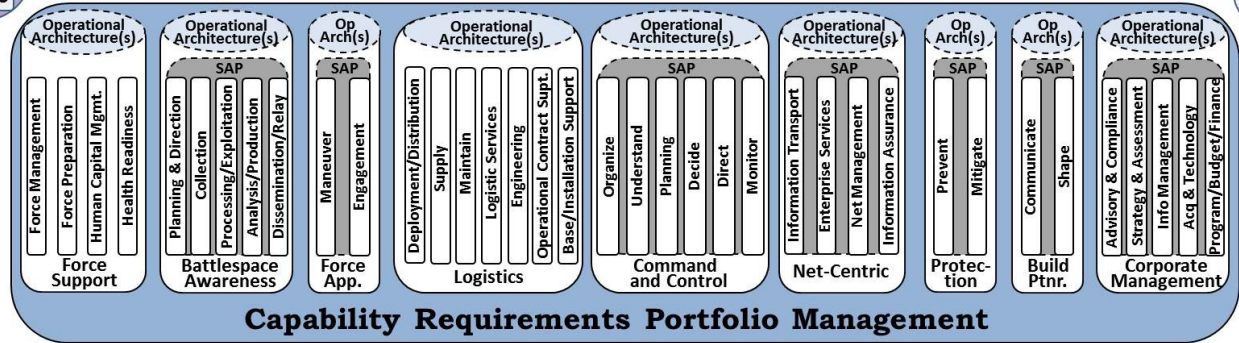
Capability-Mission Lattice

- Strategic Guidance**
- National Security Strategy
 - National Defense Strategy
 - National Military Strategy
 - Quadrennial Defense Review
 - National Security Interests
 - Quadrennial Roles/Missions
 - Defense Planning Guidance
 - Guidance for Employment of The Force
 - Unified Command Plan
 - Joint Strategic Capabilities Plan

- Planning / Operations**
- Quadrant Defense Review – Prioritized Missions**
- Maintain Nuclear Deterrence
 - Defense of the Homeland
 - Defeat Adversaries
 - Global Stabilizing Presence
 - Combat Terrorism
 - Counter Weapons of Mass Destruction
 - Deny Adversary Objectives
 - Crisis Response/Limited Contingency Operations
 - Military Engagement/Security Cooperation
 - Counterinsurgency and Stability Operations
 - Support to Civil Authorities
 - Humanitarian Assistance/Disaster Response
- Integrated Security Constructs / OPLANS / CONPLANS**
- Capstone Concept for Joint Operations/Other Concepts and CONOPS**



- Global Context / Threats**
- Critical Intelligence Parameters**
- Near Peer Competitors
 - Rogue Nations
 - Non-State Actors
 - Weapons of Mass Destruction
- Threat Assessments**
- Environmental / Natural Events
- Assessment(s)
- Treaties/Alliances
- Assessment(s)





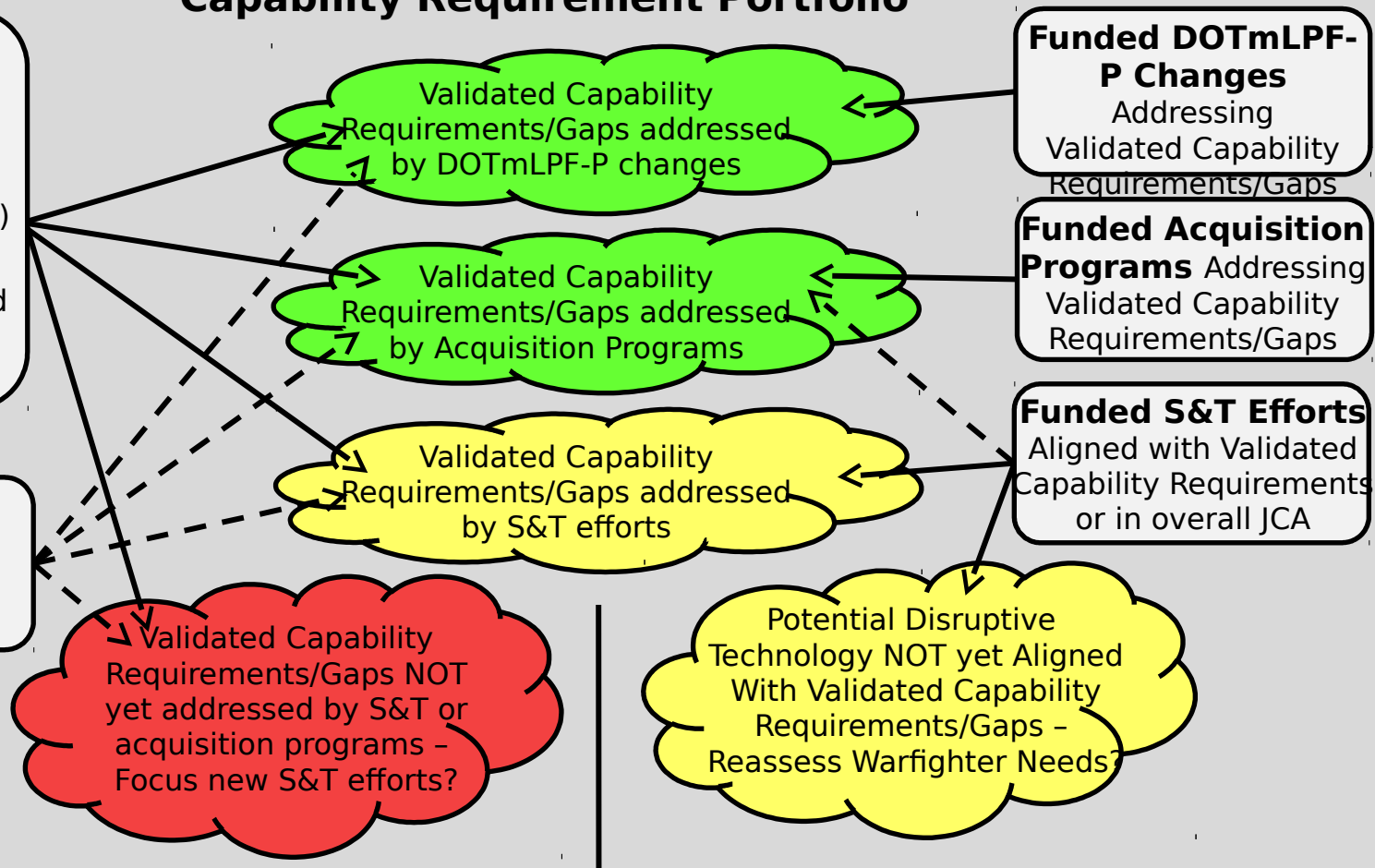
More Robust Leverage of S&T Efforts

Capability Requirement Portfolio

Capability Requirement Documents:

- Deliberate (ICDs, CDDs, CPDs, DCRs)
- Urgent/Emergent (JUONs, JEONs, and DOD Component UONs)

CCMD IPL Submissions, PBR Issue Papers, Etc.



- Changes may require reassessment of the capability requirement portfolios to ensure that any impacts are identified and appropriate actions taken to best serve the joint force.
 - Revisiting previously validated capability requirements for potential adjustment in light of the updated guidance.
 - Initiating studies or analyses to assess identified gaps or overlaps in the capability requirement portfolios.
 - Using capability requirement portfolio assessments to inform other Departmental processes or decision making, such as in PBR.

JCIDS Document Content Changes

Flow From Alternate Document Formats, mid-2012

ICD 2012



ICD 2015

- Cover Page
- Executive Summary
- Sections
 1. CONOPS Summary
 2. JCAs
 3. Capability Requirements
 4. Capability Gaps and Overlaps/Redundancies
 5. Threat and Operational Environment
 6. Assessment of Non-Materiel Approaches
 7. Final Recommendations
- Appendices
 - A. Architecture Data
 - B. References
 - C. Acronym List
 - D. Glossary

- Cover Page
- Validation Page
- Executive Summary
- Sections
 1. Operational Context
 2. Threat Summary
 3. Capability Requirements and Gaps/Overlaps
 4. Assessment of Non-Materiel Approaches
 5. Final Recommendations
- Appendices
 - A. References
 - B. Acronym List
 - C. Glossary
 - D. Classified Annex (optional)

CDD & CPD 2012



CDD & CPD 2015

- Cover Page
- Executive Summary
- Sections
 1. Capability Discussion
 2. Analysis Summary
 3. CONOPS Summary
 4. Threat Summary
 5. Program Summary
 6. KPPs, KSAs and additional performance attributes
 7. SoS Synchronization
 8. Spectrum Requirements
 9. Intelligence Supportability
 10. Weapon Safety Assurance
 11. Technology Readiness Assessment
 12. Assets Necessary to Achieve IOC
 13. IOC and FOC Schedule Definitions
 14. DOTmLPF-P Considerations
 15. Other System Attributes
 16. Program Affordability
- Appendices
 - A. Net-Ready KPP Architecture Data
 - B. References
 - C. Acronym List
 - D. Glossary

- Cover Page
- Validation Page
- Executive Summary
- Sections
 1. Operational Context
 2. Threat Summary
 3. Capability Discussion
 4. Program Summary
 5. KPPs, KSAs, and APAs
 6. Other System Attributes
 7. Spectrum Requirements
 8. Intelligence Supportability
 9. Weapon Safety Assurance
 10. Technology Readiness
 11. DOTmLPF-P Considerations
 12. Program Affordability
- Appendices
 - A. References
 - B. Acronym List
 - C. Glossary
 - D. Classified Annex (optional)

Joint DCR 2012

- Cover Page
- Executive Summary
- Sections
 1. Purpose
 2. Background
 3. Description
 4. Analysis Process
 5. Findings and Proposed Implementation Plan
 6. Constraints
 7. Policy
 8. Issues
 9. Recommendation Summary
- Appendices
 - A. Net-Ready KPP
 - B. References
 - C. Acronym List
 - D. Glossary



Joint DCR 2015

- Cover Page
- Validation Page
- Executive Summary
- Sections
 1. Operational Context
 2. Threat Summary
 3. Capability Discussion
 4. Change Recommendations
 5. Final Recommendations
 6. Implementation Plans
- Appendices
 - A. References
 - B. Acronym List
 - C. Glossary
 - D. Classified Annex (optional)

JUON & JEON 2012



JUON & JEON 2015

- Sections
 1. Title
 2. CCMD Submitted by
 3. Date Submitted
 4. CONOPS Summary
 5. Required Capability
 6. Flexibility
 7. Mission and Threat Analysis
 8. Potential Non-Materiel Alternatives
 9. Potential Materiel Alternatives
 10. Required Quantities
 11. Constraints
 12. Primary and Secondary POCs
 13. Authorized by

- Cover Page
- Validation Page
- Executive Summary
- Sections
 1. Administrative Data
 2. Operational Context and Threat Analysis
 3. Required Capability
 4. Flexibility
 5. Potential Non-Materiel Solutions
 6. Potential Materiel Solutions
 7. Required Quantities
 8. Constraints



Resource Estimate Changes

- ICD: Affordability (opportunity cost) added.
- Joint DCR: Chart for “rough-order-of magnitude” total resources added. Includes cost by FY, total across FYDP, and total life-cycle cost of implementing DOTmLPF-P solution(s). (RDT&E, Procurement, MILCON, O&M and MILPERS)
- CDD and CPD:
 - MILPERS added to affordability chart
 - Warfighter Resources for Operations & Support Costs added (includes O&M and MILPERS):
 - Pre-IOC
 - IOC to FOC
 - Post-FOC
 - Operational Life Total



Document Content and Endorsement/ Certification Guides for 2015

- Document Content Guides:
 - Intelligence Supportability - new
 - Weapon Safety Assurance - new
 - DOTmLPF-P - new
 - Net-Ready KPP - Expanded. CJCSI 61212.01F, *Net-Ready KPP*, cancelled; content added to JCIDS Manual
 - Training KPP - significant revisions
- Endorsement/Certification Guides
 - Endorsement Guide for Weapon Safety - updated
 - Endorsement Guide for Force Protection KPP - new
 - Endorsement Guide for Systems Survivability KPP - new
 - Endorsement Guide for Sustainment KPP - new
 - Certification Guide for Net-Ready KPP - new
 - Endorsement Guide for Training KPP - new
 - Endorsement Guide for DOTmLPF-P - new
 - Certification Guide for Intelligence Supportability - new



Changes to Performance Attributes

- 2012 JCIDS Manual dealt with development of KPPs
- 2015 JCIDS Manual deals with development of KPPs, KSAs and APAs
- Mandatory KPPs:
 - Force Protection - no change
 - Survivability changed to System Survivability - now applies to all CDDs and CPDs
 - Sustainment - now applies to all CDDs and CPDs
 - Net-Ready - now applies to JUON, JEON, and DOD Component UON
 - Energy - no change
 - Training - major changes

2012



2015

Force Protection	All manned systems
Survivability	All manned; may be applicable to
Sustainment	unmanned
Net Ready	ACAT I
Energy	All IS and NSS CDD/CPD All where provisions of energy impact operational reach, or protection of energy infrastructure or energy resources is needed
Training	ACAT I

ACAT I

Force Protection	No change
System Survivability	All CDDs & CPDs
Sustainment	All CDDs & CPDs
Net Ready	Added to IS-ICD, JUON, JEON, & DOD Component UON
Energy	No change
Training	All with training requirements that dictate operational performance characteristics

characteristics



Training KPP – Significant Changes

2012 – Personnel Related  2015 – Materiel Related

- Applies to ACAT I Programs
- Attributes: (among others): Proficiency level; time to train; training retention and associated metrics.
- Intent: Ensure training requirements are properly addressed from the beginning of the acquisition process and throughout the program's acquisition life-cycle.
- Endorsement: J-7, in coordination with USD(Personnel & Readiness)

- Applies to all CDDs and CPDs with materiel training requirements that dictate specific operational performance characteristics of the capability solution.
- Intent: Ensure materiel aspects of training capabilities addressed as part of the solution outlined in CDD/CPD
- Separate Endorsement Not Required. Part of DOTmLPF-P Endorsement by Joint Staff J-7, with advice from the Office of the USD (Personnel & Readiness)

- CJCSI 3312.01B, *Joint Military Intelligence Requirements Certification*, cancelled; content moved to CJCSI 5123.01G and JCIDS Manual.
- Content and Certification Guides for Intelligence Supportability added to JCIDS Manual.
- Intelligence Supportability Paragraph for CDD and CPD, para 8
 - a. Intelligence Support Category Requirements
 - 1) Intelligence Manpower Support
 - 2) Intelligence Resource Support
 - 3) Intelligence Planning and Operations Support
 - 4) Targeting Support
 - 5) Intelligence Mission Data Support
 - 6) Warning Support
 - 7) Space Intelligence Support
 - 8) Counter Intelligence Support
 - b. Cross-reference Intel requirements discussed in other places in the document, or in other documents
 - c. Intelligence Security Requirements

- IT Box Applies to:

Information Systems (IS) with software development only

Includes integration onto commercial off-the-shelf hardware

Program costs that exceed \$15 million

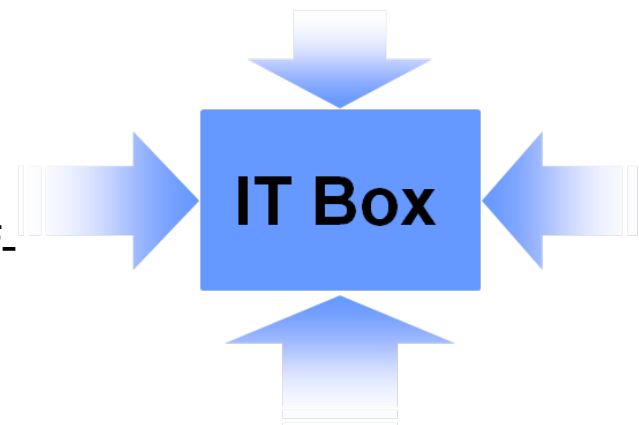
- IT Box *DOES NOT* Apply to:

IS with a developmental cost less than \$15 million

Defense Business Systems (DBS)

Systems which are an integral part of a weapon or weapon system which enables weapon capabilities and are considered part of the weapon system program

- Jan 2015 JCIDS Manual Expands on the Jan 2012 version by Implementing the “IS CDD”.



Changes to the IT Box for an IS-ICD

Requirements Organization & Oversight

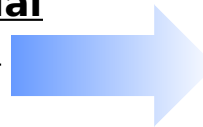
Flag-level oversight through [describe oversight body]

- Chair
- Members (list)



Capabilities & Initial Minimum Values

List Capabilities & initial values



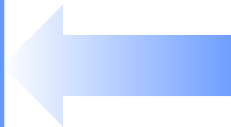
Net-Ready KPP

Added by JCIDS Manual
Feb 2015



Hardware Refresh and System Enhancements & Integration Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale



Application and System Software Development Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale



- No return to the JROC unless new core capabilities added to the IS-ICD
- Further definition of capabilities through Requirements Definition

Packages/Capability Drops



Information Systems CDD (IS-CDD)

Added by JCIDS Manual, 2015

- IS-CDD
 - Implements IT Box model used in the IS-ICD
 - May be used where a validated ICD contains capability requirements which can be addressed by a combination of IS and non-IS solution and the IT Box is applicable to the IS portion
 - May be used for MDAP and MAIS programs to comply with statutory requirements for a CDD while allowing for the flexibilities of the IT Box
 - May be used when a validated CDD was generated before the IT Box construct was introduced, and the Sponsor wants to revalidate under the IT Box construct.
- IS-CDDs are appropriate in the same situations where the IS-ICD is appropriate, and are NOT appropriate in the same situations where the IS-ICD is not appropriate.
- Capability Production Documents (CPDs) are not required as successor documents for an IS-CDD – the delegated authority may prescribe alternate document formats

Requirements Organization & Oversight

Flag-level oversight through [describe oversight body]

- Chair
- Members (list)

Key Performance Parameters

List KPPs



Major difference from IS-ICD IT Box.

KPPs may be quantified in terms of initial performance values rather than objective / threshold values. Same applies to KSAs and APAs used in the body of the IS-CDD

- No return to the JROC unless new core capabilities added to the IS-CDD
- Further definition of capabilities through Requirements Definition

JROC Approved IS-CDD

Hardware Refresh and System Enhancements & Integration Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale

Application and System Software Development Cost Controls

- Per year = \$XXX
- Lifecycle cost = \$XXX
- Rationale



Successor Documents for IS-ICDs and IS-CDDs

- CDDs are Not Required as Successor Documents for Non-MDAP IS-ICDs; CPDs are Not Required as Successor Documents for IS-CDDs.
 - Sponsors have management flexibility for successor documents
 - JCIDS Manual provides examples of potential IS ICD/CDD follow-on documents (actual names, content, and approval TBD by the delegated validation authority):
 - Requirements Definition Package (RDP) – identifies KPPs and non-materiel changes
 - Capability Drop (CD) – lower level document that specifies the characteristics of a “widget” or “app” for partial deployment of the solution
- FCB is Briefed Every 2nd Year After Validation on Progress Toward Delivering the Solution (May Recommend JROC

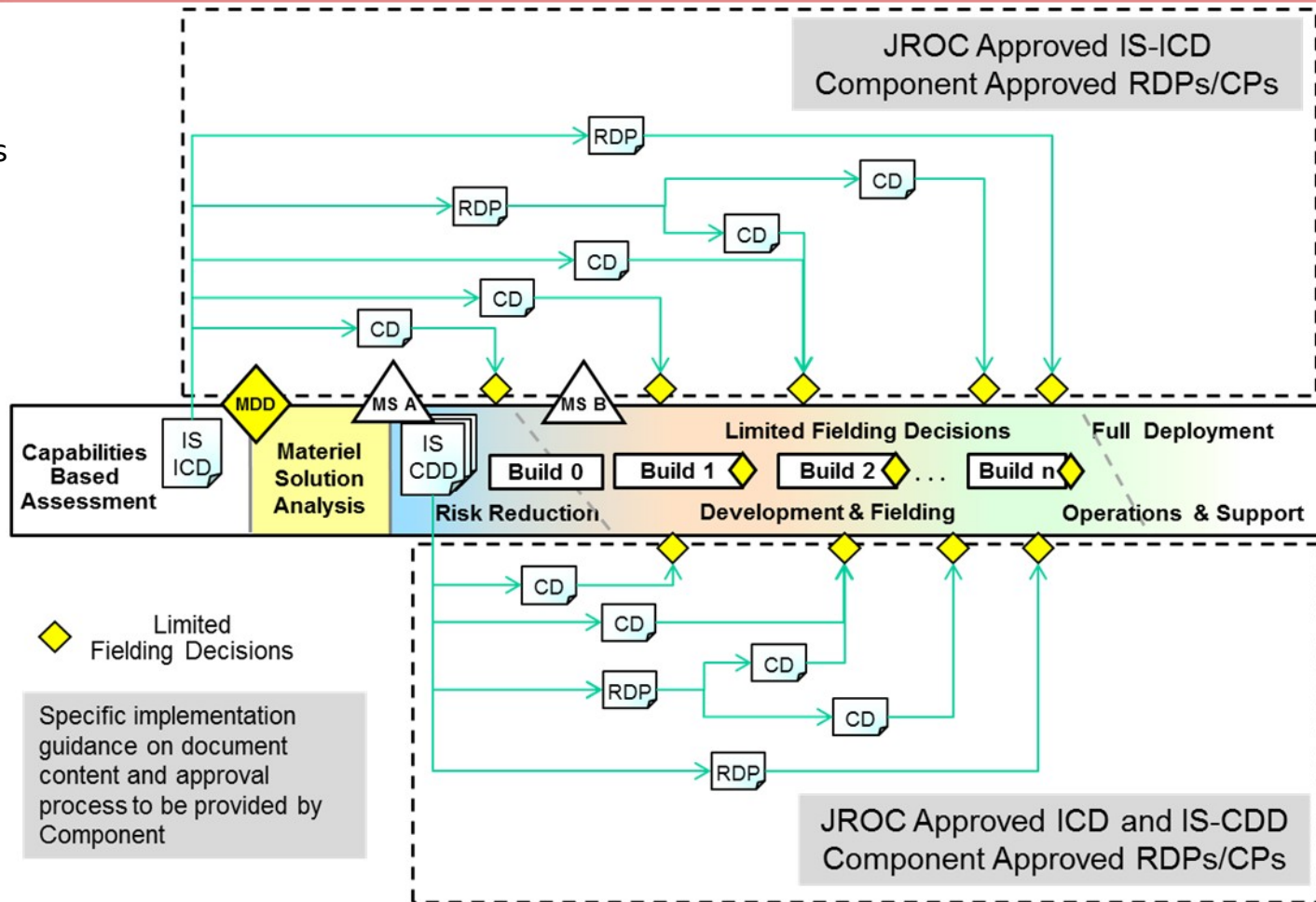


Managing an IS Requirement Using the IT Box Construct

- As the IS-ICD and IS-CDD only streamline the applicable requirements processes, the Sponsor must still ensure compliance with acquisition policy and processes in DoDI 5000.02, and Information Support Plan (ISP) policy and processes in accordance with DoDI 8330.01.
- Since the standard CDD and CPD are not typically required, an IS-ICD or IS-CDD provides Sponsors the flexibility to manage IS requirements with alternate documents and validation processes as necessary, as long as development efforts remain within the boundaries of the validated IT-Box and any additional guidance provided by the validation authority.

Example of IS-ICD or IS-CDD Successor Documents

Illustrative - not intended to limit potential flexibilities provided by the IS-ICD or IS-CDD



Referred to as “limited deployment” by DODI 5000.02

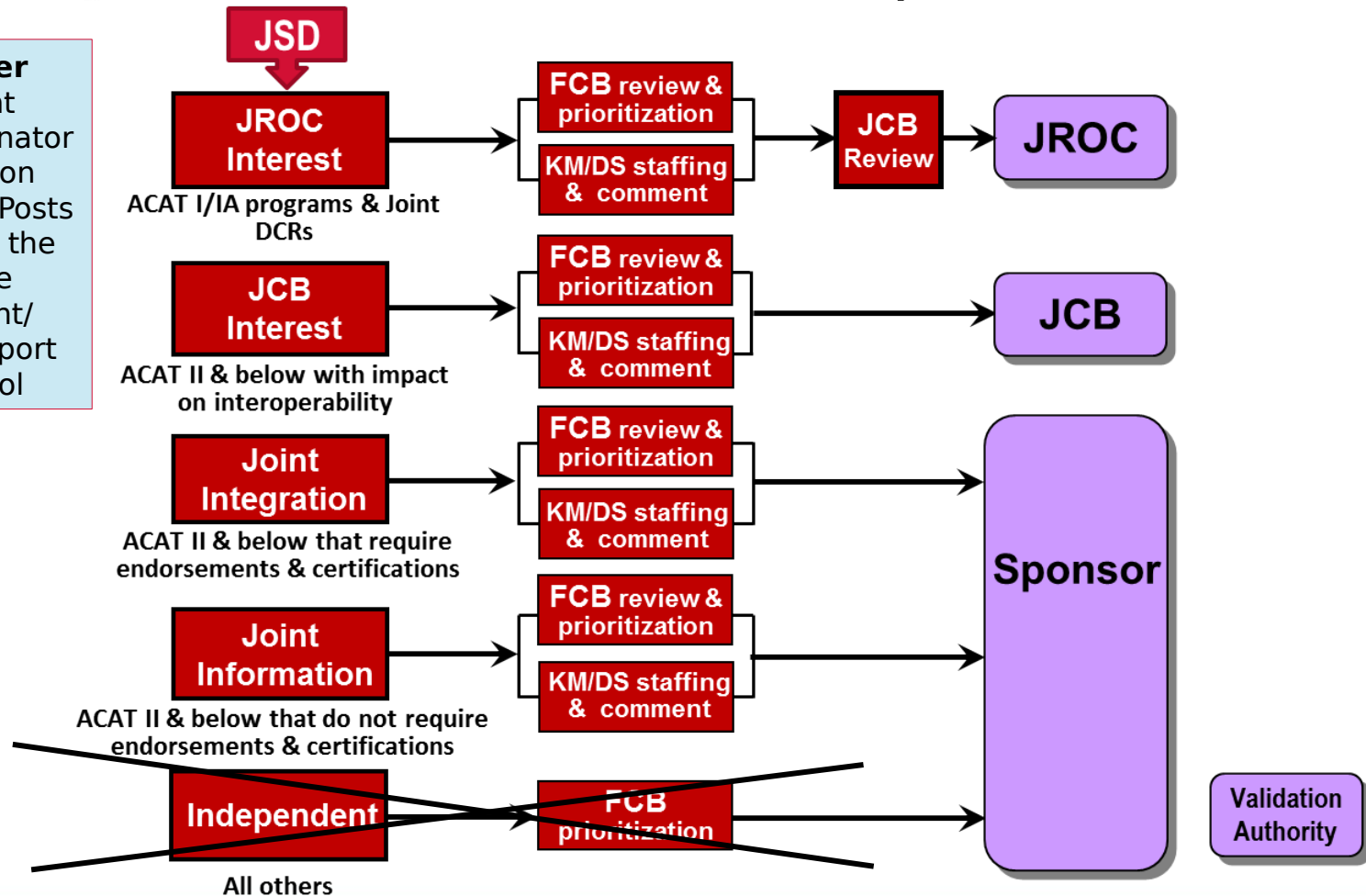
JCIDS Documents Staffing and Validation Changes



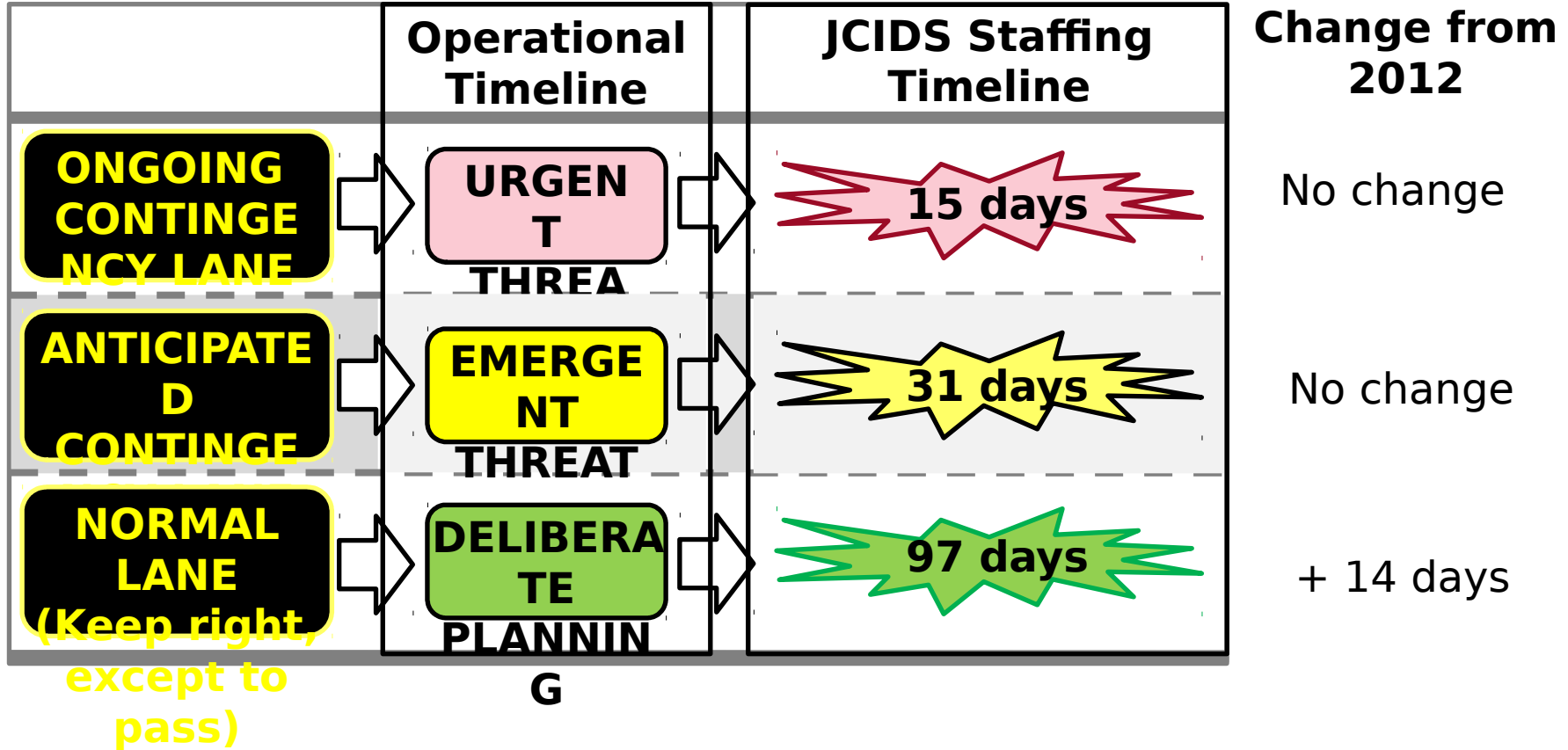
Joint Staffing Designation (JSD) of Independent Deleted

Gatekeeper

Makes Joint Staffing Designator (JSD) Decision After Sponsor Posts Document to the Knowledge Management/ Decision Support (KM/DS) Tool



Process Lanes Staffing Timeline



Use of DOD Architecture Framework (DODAF) Data

- 2012 JCIDS Manual provided one table for DODAF views to support capability requirement documents
- 2015 JCIDS Manual:
 - Provides two tables:
 - Table D-1. DODAF Views Supporting Capability Requirement Documents
 - Table D-E-4. NR-KPP Architecture Data and Associated Artifacts/Views
 - Indicates that all capability requirement documents should leverage and update DODAF views generated during a CBA or other prior study
 - Adds a comprehensive DOD Architecture Primer



DODAF Views Supporting Capability Requirement Documents

DODAF View	ICD/DCR	CDD/CPD
OV-1. High-level Operational Concept	S	Note 1
OV-3. Operational Resource Matrix Flow	S	Note 1
OV-4. Organizational Relationships Chart	S	Note 1
OV-5a. Operational Activity Decomposition Tree	S	Note 1
OV-2. Capability Taxonomy	S	Note 1
OV-6. Capability to Operational Development Mapping	S	Note 1
SV-7. Services Measures Matrix		S/P
SV-8. Systems Evolution Description (new)		S/P

S: Sponsor or operational user/representative is responsible for development

S/P: Sponsor or operational user/representative work jointly with the program office to develop

Note 1: Leverage and update DODAF views generated during the CBA or other prior study

Components may have additional requirements for CDD/CPD

OV-5a must use UJTs (and Service task list extensions if applicable) for alignment of activities

See Table D-1, and the DOD Architecture Primer, JCIDS Manual, for more detail



Net-Ready KPP Architecture Data and Associated Artifacts/Views

DODAF View	IS-ICD (RDPs/CDs)	CDD/CPD
AV-2. Dictionary of Terms	S	S/P
OV-2. Operational Resource Flow Description		S
OV-5b. Operational Activity Decomposition Tree	S	S
OV-6c. Event-Trace Description		S
DV-1. Conceptual Data Model		S
DV-2. Logical Data Flow		S
DV-3. Physical Data Flow		P
PV-2. Project Timeline		P
SV-1. Systems Interface Description	S	S/P
SV-2 or SvcV-2. Systems or Services Resource Flow Matrix		P
SV-4 or SvcV-4. Systems or Services Functionality Description		P
SV-5 or SvcV-5. Systems or Services Operational Activity to Services		P
Traceability Matrix		S/P
SV-6 or SvcV-6. Systems or Services Resource Flow Matrix	P	P
SV-7 or SvcV-7. Systems or Services Measures Matrix		P
StdV-1. Standards Profile		P

StdV-2. Standards Forecast: Standard user/representative is responsible for development

S/P: Sponsor or operational user/representative work jointly with the program office to develop

P: Obtain from program office. Components may have additional requirements for CDD/CPD

See Table D-E1-4 and the DOD Architecture Primer, JCIDS Manual, for more detail



Summary of 2015 JCIDS Changes

- Refined CBA guidance, to include use of DODAF data
- Added guidance for capability portfolio management, to include process interactions, dependencies, use of the CML, robust leverage of S&T, and post-validation guidance
- JCIDS Document changes: Streamlined formats; added validation page; additional content and endorsement/certification guidance; changes to mandatory KPPs; addition of Intel Supportability; addition of NR-KPP to IS-ICD; addition of IS-CDD; and, enhanced resource estimates in ICD, CDD, CPD and Joint DCR
- Staffing: Deleted JSD of “Independent”; added 14 days to deliberate staffing
- Enhanced use of DODAF data; tutorial added to JCIDS Manual